

AD-A082 027

SRI INTERNATIONAL ARLINGTON VA STRATEGIC STUDIES CENTER  
COMPENSATION AGREEMENTS IN U.S.-USSR ECONOMIC RELATIONS.(U)  
OCT 78 M M EARLE, G FROMM, A LIEBERMAN

F/G 5/3

C-6-36237

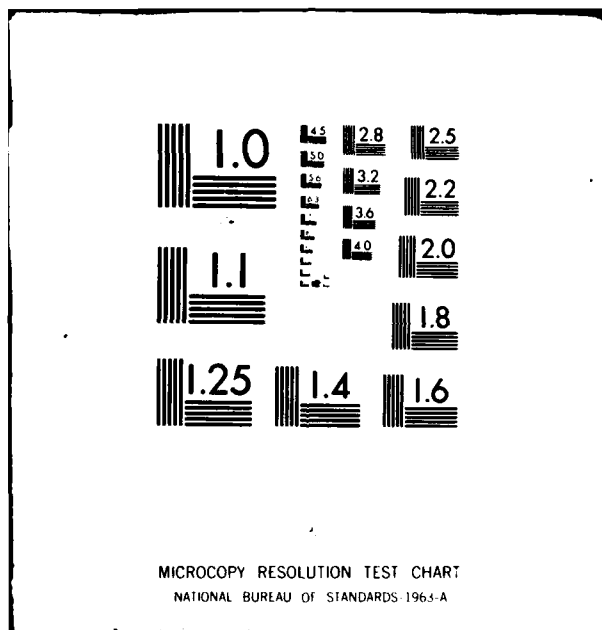
UNCLASSIFIED

SSC-TN-5552-1

NL

1-1  
400 0-1

END  
DATE  
FILMED  
4-80  
DTIC



ADA 082 027

LEVEL

6  
COMPENSATION AGREEMENTS IN U.S.-USSR  
ECONOMIC RELATIONS.

12  
DTIC  
ELECTE  
MAR 19 1980

10  
M. Mark Earle, Jr.  
Gary/Fromm,  
Anne Lieberman  
Charles Morit  
Francis Wil

Paper prepared by staff of SRI International for a parallel research program with the Institute of World Economy and International Relations of the Academy of Sciences of the USSR.

12 52

15 C-6-36237

11 October 1978

9 Final Report

Technical Note  
SSC-TN-5552-1

This document has been approved  
for public release and sale; its  
distribution is unlimited.

DOC FILE COPY

410349

80 3 18 038

JP

## PREFACE

This paper was designed to serve as a partial basis for discussion at the SRI/IMEMO Workshop on Compensation agreements held in Moscow 6-11 December 1977. This workshop was one facet of a continuing parallel research program on U.S.-USSR economic relations developed by SRI International and the Institute for the World Economy and International Relations (IMEMO) of the Soviet Academy of Sciences. The paper was presented and revised in light of the discussion with Soviet scholars. This paper only reflects materials available on compensation agreements through February 1978. A summary of discussion at the workshop is published separately as SSC-TN-5552-2. A list of workshop attendees appears as Appendix A to this report.

Those contributing to this draft included: M. Mark Earle, Jr., Gary Fromm, Anne Lieberman, Charles Movit, and Francis W. Rushing. Valuable assistance was provided by Allen Lenz of the Department of Commerce's Bureau of East-West Trade.

Charles A. Anderson  
President

## ACKNOWLEDGMENT

Preparation of this report was accomplished under U.S. Department of Commerce Contract 6-36237 (SRI Project 5552). Additional support from the International Research Exchange Board is also acknowledged.

## CONTENTS

PREFACE . . . . .	11
ACKNOWLEDGMENT . . . . .	11
LIST OF TABLES . . . . .	v
LIST OF FIGURES . . . . .	v
I INTRODUCTION . . . . .	1
A. Background . . . . .	1
B. Definition of Countertrade . . . . .	2
C. History of U.S.-USSR Trade and Compensation Agreements . . . . .	4
D. National Interest in the Expansion of U.S.-USSR Trade . . . . .	11
II FRAMEWORK FOR ASSESSMENT . . . . .	13
III U.S. PRIVATE SECTOR PERSPECTIVE . . . . .	20
A. Time Horizon . . . . .	21
B. Pricing . . . . .	23
C. Financing of Sales and Purchases . . . . .	24
D. Accomplishing the Transfer of Technology . . . . .	26
E. Quality Control of Products Exported to the U.S. or Third Markets . . . . .	28
F. Marketing Aspects of Buyback Product . . . . .	30
IV PROSPECTS FOR FURTHER DEVELOPMENT OF ECONOMIC RELATIONS ON A COMPENSATORY BASIS . . . . .	33
A. Prospects for Continued Development of Compensation Agreements . . . . .	33
B. Commodity Areas . . . . .	35
C. U.S. Perspectives on the Need for Modification in Compensation Arrangements . . . . .	35

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DOC TAB	<input type="checkbox"/>
Unannounced Justification	<input type="checkbox"/>
By _____	
Distribution/ _____	
Availability _____	
Dist.	Availability of special
<b>R</b>	

V	SUGGESTED ISSUES FOR DISCUSSION . . . . .	41
A.	Economics of Compensation Agreements . . . . .	41
B.	Practical Problems . . . . .	42
C.	Political/Economic Issues . . . . .	43
D.	Prospects . . . . .	43

#### APPENDICES

A	U.S./SOVIET WORKSHOP PARTICIPANTS . . . . .	45
---	---	----

## TABLES

1	U.S.-USSR Foreign Trade . . . . .	5
2	USSR Compensation Agreements with the West . . . . .	6
3A	Perceived Advantages and Disadvantages of Countertrade . . . . .	14
3B	Areas of Concern in Countertrade . . . . .	16
4	Projected USSR Trade with the Industrialized West . . . . .	34
5	Projected Debt-Export and Debt-Service Ratio, 1976-1985 . . . . .	36

## FIGURES

1	Analytic Model of a Counterpurchase Transaction . . . . .	22
---	---	----

## I INTRODUCTION

### A. Background

International trade takes place in a variety of different forms. At the one pole, there are freely functioning world markets in which exchanges are conducted on a cash or credit basis and prices of goods and services and quantities sold are determined by competitive forces and the interplay of large numbers of buyers and sellers. At the other extreme are bilateral transactions involving barter and direct exchange of items without transfer of money or negotiable credits. In between these polar cases are transactions containing mixtures of free market and bilateral monopoly elements. Within recent years, use of mixed-role transactions has become more prevalent, especially countertrade agreements between planned and market economies.

72-11  
In a modern setting, the essential feature of countertrade is the purchase of goods and services by state trading organizations in one country with a concomitant requirement that the exporter (a firm or country) buy back, or receive as pay back, imports to offset all or part of the currency claims arising from the primary transactions. In the U.S.-USSR context, such an arrangement is termed a compensation agreement. The transaction is accompanied by provision of credits from the exporter and/or financial institutions external to the importing nation.

This paper attempts to present, for the purposes of discussion, private sector attitudes and concerns in regard to participation in compensation agreements and the implications of this private sector perspective for the prospects for further development of compensation agreement in U.S.-USSR trade. While the focus here is the private sector, the analysis is accomplished within the broader framework of national



interests in U.S.-USSR economic relations, which includes political-strategic as well as economic dimensions.

B. Definition of Countertrade

For the purposes of this paper, the term countertrade refers to a set of related transactions between the USSR and the U.S. by which the cost of a Soviet import from the U.S. is offset by a balancing U.S. purchase of Soviet products. In most countertrade arrangements (except barter agreements), Western credits are used to partially or fully finance the Soviet purchase, while the hard currency obtained from the subsequent Soviet exports is used to make payments against Western credits. Countertrade normally occurs in one of three forms: barter, counterpurchase, or compensation arrangements.

A barter transaction is a one-time, relatively short-term transaction with little time lag between delivery of goods by the two partners. In most instances, only one contract is signed, covering both sale of Western products and purchase of Eastern ones. It is the least often used form of countertrade.<sup>1</sup>

A counterpurchase transaction, involves two separate contracts: one for the sale of the Western product (in most cases technology or equipment) and the other for the sale of Soviet products. The Eastern purchase is made with the use of Western credits which are fully or partially repaid by the hard currency generated from the sale of the Eastern goods. The Eastern goods are not usually related to the technology, plant, or equipment imported from the West, and they are generally manufactured or semi-manufactured goods. The exchange of goods takes place over a three-to-five year span. The consignment of Soviet deliveries may, in turn, be destined for a Western trading

---

<sup>1</sup> JeNelle Matheson, Paul McCarthy, Steven Flanders, Countertrade Purchases in Eastern Europe, Forthcoming, 1977, pp.4-5.

house, or other third party. Payment for the Western export can be made in one of two ways: either each partner receives full cash payment at the time of delivery, or the Western partner receives partial payment in cash and part in product while the Eastern partner receives full cash payment.<sup>1</sup>

Compensation agreements (also known as buy-back agreements) are a set of transactions whereby hard currency payments required of the USSR as a result of inputs from a Western firm is offset by an agreement on the part of Western firms to purchase Soviet products. The Western export is not directly paid for by the Soviet good, but rather is financed by Western credit or a contract denominated in hard currency. The subsequent Soviet exports, usually covered under a separate contract, generate hard currency for servicing and repayment of debt to Western creditors. The U.S. purchaser of the Soviet product is not necessarily the company or group of companies which made the original sale, nor are the products sold always directly related to the purchase from the West.<sup>2</sup>

Individual compensation agreements may vary widely in a number of basic characteristics which might be used to categorize existing or potential deals--degree of fabrication of exports and imports; duration; share of buy-back in total compensation; and absolute size of import and export deliveries. The most important compensation agreements to date have been characterized by the following attributes, which represent perhaps the most problematic configuration:

- asymmetric composition of trade--Western exports consisting of technology and equipment, usually for a new industrial project, with Soviet exports in return consisting of resultant products from the new facility, usually raw or semi-finished materials

---

<sup>1</sup> Matheson, McCarthy, and Flanders, op cit. pp. 5-7.

<sup>2</sup> "The Role of Compensation Agreements in East-West Trade," U.S. Department of Commerce Bureau of East-West Trade, Draft Report (August, 1976).

- to date, most Soviet compensation agreements with the West have been on a large scale, potentially involving more considerable hard-currency commitments than if more traditional forms of import financing had been used
- large extensions of Western credit have, nevertheless, been key aspects of existing compensation agreements, since substantial delays between Western exports and Soviet exports are specified. The future availability of hard-currency for servicing and repayment of Western credits is assured through contracts for deliveries of Soviet products to the West
- The periods encompassing product flows under compensation arrangements have typically fallen in the ten to twenty year range.

As will be indicated in the discussion of corporate objectives below, it is precisely the complexity of negotiating these arrangements, the securing of long-term financing on a large scale, and the long duration of compensation agreements that cause U.S. businessmen to carefully consider alternatives before choosing a compensation agreement as the means of expanding business with the Soviet Union and Eastern Europe. The specific features of the compensation agreement will have implications, as well, for U.S. private sector perspectives on pricing, the nature of technical assistance provided, and procedures for assuring the quality of resultant products delivered to the U.S. firm.

Having defined compensation agreements, a brief discussion of the history and objectives of these agreements in the context of U.S. and USSR trade will be presented.

#### C. History of U.S.-USSR Trade and Compensation Agreements

A marked growth in U.S.-USSR annual trade turnover first occurred in the post war period in 1969 when total trade increased to \$157 million from \$116.2 million in 1968. (See Table 1) The following two years saw more moderate growth, but in 1972 trade between the U.S. and Soviet Union almost tripled over the previous year's volume, and then

**U.S.-USSR FOREIGN TRADE<sup>1</sup>**  
(Millions of U.S. Dollars)

	<u>Total USSR Imports From the U.S.</u>	<u>USSR Imports of Grain From the U.S.</u>	<u>Total USSR Imports From the U.S. Less Grain Imports</u>	<u>Total USSR Exports to the U.S.</u>	<u>Total U.S.-USSR Turnover</u>
1950	0.8			38.3	39.1
1951	0.1			27.5	27.6
1952	Negligible			16.8	16.8
1953	Negligible			10.8	10.8
1954	0.2			11.9	12.1
1955	0.3			17.1	17.4
1956	3.8			24.5	28.3
1957	4.6			16.8	21.4
1958	3.4			17.5	20.9
1959	7.4			28.6	36.0
1960	39.6			22.6	62.2
1961	45.7			23.2	68.9
1962	20.2			16.3	36.5
1963	22.9			21.2	44.1
1964	146.4	110.0	36.4	20.7	167.1
1965	45.2			42.6	87.8
1966	41.7			49.6	91.3
1967	60.3			41.2	101.5
1968	57.7			58.5	116.2
1969	105.5			51.5	157.0
1970	118.7			72.3	191.0
1971	162.0	27.8 <sup>2</sup>	134.2	57.2	219.2
1972	542.0	391.0 <sup>2</sup>	151.2	95.5	637.7
1973	1,190.0	917.4 <sup>2</sup>	272.6	214.8	1,404.8
1974	609.2	301.7 <sup>2</sup>	307.5	350.2	959.4
1975 <sup>2</sup>	1,832.7	1,112.9	719.8	254.2	2,086.9
1976 <sup>2</sup>	2,305.9	1,358.6	947.3	220.6	2,526.5

<sup>1</sup> Unless otherwise indicated, data from International Economic Report of the President, February, 1974, p. 101 & March 1976, p. 153, IMF Direction of Trade, November 1974, and East-West Trade, Export Administration Report, U.S. Department of Commerce, 2nd qtr. 1973, 1st qtr. 1974, 4th qtr. 1974. Hearings before the Subcommittee on Europe of the Committee of Foreign Affairs, U.S. House of Representatives, May, June, July 1974,

<sup>2</sup> U.S. Trade Status with Communist Countries, Office of East-West Policy and Planning, Bureau of East-West Trade, U.S. Department of Commerce, 15 July 1977.

Table 2  
U.S.S.R. COMPENSATION AGREEMENTS WITH THE WEST

Western Country	Western Supplier	Year Signed	Type of Soviet Import	Value of Soviet Imports		Type of Soviet Export	First year of Soviet Deliveries	Value of Soviet Exports		Remarks
				Million US \$	Million US \$			1975-80	1981-85	
SIGNED AGREEMENTS										
Natural Gas										
France	Gas de France	1972	Gas field equipment	250		Natural gas	1976	700	1,462	
Austria	Voest, Denmark	1969	Large-diameter pipe	100		Natural gas	1969	900	1,000	Similar agreements signed in 1974, 1975.
Italy	ENI	1971	Large-diameter pipe	190		Natural gas	1974	1,200	3,200	
Finland	N.A.	1970	Pipe	N.A.		Natural gas	1974	N.A.	N.A.	
West Germany	Rohgas, Mannesman Export AG	1970, 1972, 1974	Large-diameter pipe	1,500		Natural gas	1974	2,800	4,700	Three separate deals
France, Austria West Germany	N.A.	1976	Large-diameter pipe and equipment	900 <sup>1/</sup>		Natural gas	1981	N.A.	N.A.	Part of triangular deal with Iran
France	Chp (Incl. a subs. of Int'l. Systems and Control Corp.)	1974	Filter separators and gas compressor stations	26		Natural gas	N.A.	N.A.	N.A.	
Forestry										
Japan	KS Industries	1969	Forestry handling equipment	163		Timber products	1969-74	N.A.	N.A.	
Japan	Japan Chip Trading Company	1971	Wood chip plant	45		Wood chips and pulp	1972-81	145	50	
Japan	KS Industries	1974	Forestry handling equipment	500-550		Timber products	1975-79	1,100	N.A.	
France	N.A.	1974	Pulp-paper complex	60		Wood pulp	1977	34	50	Finland & Sweden also participated in transaction

<sup>1/</sup> Estimated

Table 2 (Continued)

Western Country	Western Supplier	Year Signed	Type of Soviet Import	Value of		Type of Soviet Export	First year of Soviet Deliveries	Value of		Remarks
				Soviet Imports Million US \$	Soviet Exports Million US \$			1975-80	1981-85	
				<u>Chemicals</u>						
West Germany	Salzgitter	1972	Polyethylene plant	37		Polyethylene	1972	N.A.	N.A.	
West Germany	Salzgitter	1972	Polyethylene plant	61		Polyethylene	N.A.	N.A.	N.A.	
France	Litvin S.A.	1973	Styrene/Polystyrene	100		Polystyrene	1978	50	60	
Italy	Montedison	1973 (preliminary agreement)	Chemical plants (7)	600		Ammonia	1978	175	250	4 plants ordered so far. Contracts signed for one urea and one acrylonitrile plant in 1974; and two freon plants in 1975.
UK/US	(Constructors) John Brown, Union Carbide	1974	Polyethylene plant	50		Polyethylene	N.A.	N.A.	N.A.	
France	Creusot-Loire	1974	Ammonia plants(4)	220		Ammonia	1978	100	225	
Italy	ENI	1974 (preliminary agreement)	Chemical plants(6)	670-1,000 <sup>1/</sup>		Chemical products	N.A.	N.A.	N.A.	Only one plant has been ordered so far, a urea plant in 1974.
US	Chemico	1974	Ammonia plants(4)	200-400		Ammonia	1978	2,000	2,500	
US	Occidental	1974	Fertilizer storage & handling facilities	100		Ammonia	N.A.	N.A.	N.A.	
US/France	Occidental Entrepose	1975	Ammonia pipeline	100-200 <sup>1/</sup>		Ammonia	N.A.	N.A.	N.A.	
Italy	Tecnimont	1975	Polypropylene	100-130 <sup>1/</sup>		Possibly chemical intermediates	N.A.	N.A.	N.A.	
Italy	ENI	1975	Urea plants(2)	170 <sup>1/</sup>		Possibly urea, ammonia	N.A.	N.A.	N.A.	
US	Lummus/Monsanto	1974	Acetic Acid Plant	45		Acetic Acid	N.A.	N.A.	N.A.	
France	Nordon et Cie, Rapidase (Fr. Subs. of Baxter Lab.)	1974	Enzyme Plant	20		N.A.	N.A.	N.A.	N.A.	
Italy	Pressindustria	1975	Surface-active detergent plant	8.3		Monoethylene glycol, organic chemicals, surface-active agents	N.A.	N.A.	N.A.	

<sup>1/</sup> Estimated

Table 2 (Continued)

Western Country	Western Supplier	Year Signed	Type of Soviet Import	Value of Soviet Imports Million US \$	Type of Soviet Export	First year of Soviet Deliveries	Value of Soviet Exports Million US \$	Remarks
				Other			1975-80 1981-85	
US	Pepsi Co.	1974	Equipment, Cola concentrates	N.A.	Vodka	1971 <sup>1/</sup>	N.A. N.A.	
Japan	Sakhalin Oil Development Co. Ltd.	1975	Oil exploration equipment	150-250	Oil and gas	N.A.	N.A. N.A.	
Italy	Finnsider	1974	Large-diameter pipe	1,500	Scrap metal, coal, iron ore	1975	N.A. N.A.	Soviet deliveries to cover 65% of value of Soviet pipe imports
Japan	Southern Yakutsk Coal Development Corp. Ltd.	1974	Coal development equipment	450	Coal	1979	80 860	Soviets have requested additional credits of \$150 million
West Germany	West German Consortium (preliminary agreement)	1974	Steel Complex	1,000-1,200 <sup>1/</sup>	Iron ore pellets	1979	450 1,000	Initial contract under agreement signed in March 1975. Second stage may bring total value of Soviet imports to at least \$2 billion
France	Pechiney-Ugine-Kuhlmann	1976	Alumina refinery	250	Aluminum	1979	N.A. N.A.	U.S.S.R. to sell back 50,000 tons of aluminum over 8 1/2 years.
US	Philip Morris, Inc. Powell Manufacturing Co.	1976	Tobacco, cultivating equipment, chemicals and materials for production of tobaccos.	N.A.	Oriental Leaf tobacco	N.A.	N.A. N.A.	

<sup>1/</sup> Estimated

Table 2 (Concluded)

Western Country	Western Supplier	Year Signed	Type of Soviet Import	Value of Soviet Imports Million US \$	Type of Soviet Export	First Year of Soviet Deliveries	Value of Soviet Exports Million US \$	Remarks
<u>POTENTIAL AGREEMENTS WITH THE WEST</u>								
							<u>1975-80</u>	<u>1981-85</u>
Japan, US	US, Japanese firms in competition	N.A.	Pulp-paper plants	1,000-2,000	Wood products	Early 1980s	N.A.	N.A.
UK	Price & Pierce, Ltd.	N.A.	Wood Processing	120- 220	Forestry products	N.A.	N.A.	N.A.
US, Japan	Tokyo gas, El Paso Co., Occidental Petroleum	N.A.	Development of natural gas deposits in Eastern Siberia	3,000 <sup>1/</sup>	Liquified natural gas	1980s	N.A.	N.A. Exploration phase to begin in 1976
US	Tenneco Inc., Texas Eastern, Brown & Root, Inc.	N.A.	Development of natural gas deposits in Western Siberia--North Star project	3,000 <sup>1/</sup>	Liquified natural gas	1980s	N.A.	N.A.
US	Bendix Corporation	N.A.	Spark Plug Plant	50	Spark Plugs	N.A.	N.A.	N.A.
US	FMC	N.A.	Tomato Processing Plant	N.A.	Canned Tomato Paste	N.A.	N.A.	N.A.
US	Colgate-Palmolive	N.A.	Powdered Laundry Detergent Plant	N.A.	Powdered Laundry Detergent	N.A.	N.A.	N.A.

<sup>1/</sup> Estimated

SOURCE: US Government



more than doubled again in 1973. A large part of the increase in those two years was due to heavy Soviet imports of grain from the U.S. Even without the grain shipments, however, the volume of trade continued to increase each year, and U.S. exports to the USSR, excluding grain, reached \$947.3 million in 1976.

The first major East-West compensation agreement was signed in 1968, when the Soviet Union contracted to purchase large-diameter steel pipe from firms in Austria, West Germany, Italy, and France. (See Table 2) The pipe was used to construct a gas pipeline in the USSR, and financing--provided by government-supported consortia--was to be repaid by the proceeds of the Soviet natural gas sales to Western distributors. This arrangement was followed by numerous others involving Western European, Japanese--and, more recently,--U.S. firms. The largest such arrangement involving a U.S. firm to date is an agreement under which Occidental Petroleum and Chemico are supplying equipment, technology and services valued at \$400 million for four ammonia plants and fertilizer storage transport facilities. Part of the financing was provided by \$360 million in loans from the Export-Import Bank and private U.S. banks which will be repaid by Soviet deliveries of ammonia, potash and urea to Occidental and other U.S. firms.

Western products exported and to be exported to the USSR under compensation agreements signed between 1969 and 1976 are valued at between ten and twelve billion dollars. When 1977 agreements are added, the figure may increase as much as seven or eight billion dollars. In terms of the total value of compensation agreements, the U.S. is now clearly the largest single Soviet partner.<sup>1</sup> The importance of the U.S.

---

<sup>1</sup> Although in terms of the number of agreements, the U.S. is about even with the Federal Republic of Germany, Japan and Italy. The difference is explained by the average dollar value of the U.S. agreements--about \$800 million versus about \$500 million for these other countries.

in Soviet trade relations is explained by Soviet interest in advanced technology, the ability of U.S. firms to implement large contracts, the availability (at least initially) of financial resources, and U.S. expertise in marketing.

D. National Interest in the Expansion of U.S.-USSR Trade

From the point of view of U.S. national interest, the expansion of trade with the USSR has two aspects--expansion of U.S. trade per se and increased economic interaction with the Soviet Union. Compensation arrangements will be viewed positively from this perspective if they provide for accomplishment of the national objectives along these two axes.

Promoting the expansion of U.S. trade is a basic policy of the U.S. government. On the export side, the benefits that accrue to the U.S. relate to increased employment opportunities for American workers and higher corporate profits--growth in national income which is multiplied through stimulation of consumption and investment activity. The positive balance of trade achieved by the U.S. with the Soviet Union serves, as well, to offset trade deficits with Western nations and petroleum-exporting nations. On the import side, potential new supplies of raw materials and lower cost inputs for U.S. manufacturers can result. The bilateral nature of compensation arrangements, however, is not in harmony with expressed U.S. objectives of liberalizing world trade on a multi-lateral basis. In addition, to the extent that development of domestic resources is neglected and further dependence on foreign suppliers of raw materials is encouraged, U.S. vulnerability to economic pressure from abroad is increased. Of course, the benefits to the U.S. economy are of national interest. Economic benefits will not be pursued at the cost of political objectives.

That expanded economic relations is an important component of overall normalization of U.S.-USSR interchange was expressly acknowledged

in the basic document which marked a new era in Soviet-American relations signed 29 May 1972:

The U.S. and the USSR regard commercial and economic ties as an important and necessary element in the strengthening of their bilateral relations and thus will actively promote the growth of such ties. They will facilitate cooperation between the relevant organizations and enterprises of the two countries and the conclusion of appropriate agreements and contracts, including long-term ones.<sup>1</sup>

Beyond this basic premise, however, U.S. policy in expansion of economic relations with the USSR is intended to reflect a consideration, as well, of systemic economic differences and national security concerns. Thus the perspectives on compensation agreements with the USSR from the point of view of national objectives must stem from a net assessment of the advantages and disadvantages of these agreements within the context of implications for public and private sector objectives, political and economic. A consideration which cannot be ignored is the potential impact on U.S. national security of contributions to the economic and technological capabilities of other nations. An attempt to provide a framework for this assessment appears in Section II of this paper.

The entries in the assessment framework apply specifically to trade on a compensatory basis. Some of the advantages and disadvantages listed are pertinent to trade between market oriented and non-market economies in general, while others are peculiar to countertrade or indicate positive or negative impacts of traditional trade which are mitigated or reversed by the use of compensation agreements.

---

<sup>1</sup> "Basic Principles of Relations Between the United States of America and the Union of Soviet Socialist Republics," 29 May 1972, Weekly Compilation of Presidential Documents, p. 943 (June 1972).

## II FRAMEWORK FOR ASSESSMENT

The following tables present advantages of countertrade perceived by various interests and their areas of concern. Each of these points is, of course, not of equal importance. Each individual arrangement would encompass aspects related to some concerns and not others and would be subject to a net assessment on its own merits.

The advantages and disadvantages to countertrade arrangements as perceived by Western firms is expanded upon in Section III of this paper. As will be indicated, Western firms seek to minimize the uncertainty inherent in the arrangement and ensure that a substantial percentage of total anticipated profit can be obtained at an early stage. The attractiveness of the arrangement lies mainly, from the Western firm's point of view, in penetrating new markets that might otherwise be denied them and in obtaining an assured supply or lower-cost supply of inputs.

The Western nation must balance the economic and political benefits accruing from expanded trade with non-market nations against risks of increased dependence on foreign suppliers, market disruption, fostering bilateralism in trade to its disadvantage among its trading partners, and contributing to the capabilities of nations subscribing to a competing socio-economic system. It can be seen that while some of these benefits and disadvantages would characterize the expansion of standard forms of trade, where, e.g. bilateralism in connection with countertrade is seen to possibly weaken the international trade framework, expanding the involvement of non-market economies in general trade with market-oriented nations might be seen as strengthening that framework.

While on initial consideration, compensation arrangements, to the extent they are acceptable to Western trading partners, would not seem to

Table 3 A

PERCEIVED ADVANTAGES OF COUNTERTRADE

I. Western Firms

1. Market penetration--entry to a large and relatively untapped market.
2. Stable demand largely immune from market economy business cycles.
3. Potential protection from competition by other Western firms.
4. Realization of additional volume late in the life-cycle of products.
5. Offset to actual or potential pre-emptive threats by competitors who may not accept countertrade.
6. Secure assured supply of raw and semi-finished materials.
7. Lower production costs of components, parts, or assemblies.
8. Access to other related markets (for example, trade with one CMEA nation may facilitate trade with other CMEA nations).
9. Sale of technology may enable recovery of research and development costs if market of countertrade nation considered not otherwise accessible.
10. Strengthening of a firm's international image.

II. Western Nations

1. Export stimulus and income growth.
2. Lower cost imports.
3. Potential contribution to damping of business cycle fluctuations.
4. Raw material supply.
5. Increased world trade.
6. Contribution to political relations.

### III. Countertrade Nations

1. Acquisition of Western goods and technology which may enhance domestic consumption, production, and development.
2. Aid in improving balance of trade and payments. Excess earnings may be applied to other imports.
3. Provision of Western credit.
4. Vehicle for penetration of Western markets.
5. Eases foreign trade planning. Self-liquidating aspects of countertrade reduces uncertainty about future hard currency earnings.
6. Continuing technology updates.
7. Interaction with Western suppliers may spur efficiency and quality of production.

### IV. Western Banks

1. Profitable loan opportunities.
2. Extension of expansion of activities in markets.
3. Introduction of increased stability in portfolio due to long-term nature.

### V. Rest-of-the-World

1. Stimulation of world income and trade with indirect effects on demands for third country outputs.
2. Availability of countertrade nation exports, perhaps at reduced prices due to increased supplies.

---

Source: Supplemented and partially adapted from J. Matheson, P. McCarthy, and S. Flanders, "Countertrade Practices in Eastern Europe," and OECD, Unpublished materials.

Table 3 B

AREAS OF CONCERN IN COUNTERTRADE

I. Western Firms

1. Extended and costly contract negotiations and implementation. Need to market countertrade items if not used directly.
2. During market economy recession periods when absorption possibilities are weaker, pressures increase to raise countertrade fully to offset hard currency costs.
3. Potential denial of market on non-economic grounds. Possibilities of retaliation by competitors.
4. Pressures to update technology and provide latest know-how; failure to comply may result in loss of market.
5. Use of countertrade to drive down cost of Western supplied items and increasing demands for larger offset purchase provisions.
6. Risks of non-market criteria for supply cutoff. Pressures to accept substitutes, including manufactures as alternative compensation.
7. Costly, incomplete, or lack of control over quality, design, packaging, service. Countertrade goods may be subject to anti-dumping, countervailing tariff, or quantity restrictions.
8. Complexity of negotiations and balancing of countertrade demands of various nations.
9. Technology update provisions may be required. Risk of potential competition at some future date.
10. Weakening of market-based decisionmaking and resource allocation.

II. Western Nations

1. Increased dependence on foreign demand.
2. Potential disruption of domestic and third-country markets by countertrade.
3. Possibilities of dumping of countertrade items during recessions.

4. Increased dependence on foreign supply.
5. Bilateralism weakens international framework of trade and market system.
6. Potential increase in political risks due to absolute or relative strengthening of foreign capabilities through goods and technology transfer.

### III. Countertrade Nations

1. Negotiation costs. Diversion of resources from current or future domestic use to satisfy needs for payment. Loss of control of marketing countertrade export price, type of outlet, purchaser loyalty.
2. Resistance to acceptance of countertrade by Western firms and nations. Discounting of countertrade items hurts terms of trade (relative prices).
3. Increased debt if purchases not fully offset by countertrade or other exports.
4. Less than complete realization of market potential if countertrade firm not good outlet or entry point.
5. Difficulty of arranging trade for items not in substantial demand in Western or world markets.
6. Demands for technology updates offering countertrade as compensation may require unduly attractive terms to achieve Western firm acceptance.
7. Possibility of weakening domestic political and management control and strengthening resistance to traditional production methods.

### IV. Western Banks

1. Possibilities of default on economic grounds or denial of loan obligations on non-economic bases.
2. Difficulties and costs of obtaining data on creditworthiness.
3. Fluctuation in interest rates over the duration may decrease attractiveness of long-term commitment relative to alternative uses of funds.

### V. Rest-of-the-World

1. Bilateralism weakens opportunities for direct participation in foreign trade markets of countertrade nations.



2. Possibilities of disruption of domestic and world markets through price concessions or dumping.

---

Source: Supplemented and partially adapted from J. Matheson, P. McCarthy, and S. Flanders, "Countertrade Practices in Eastern Europe," and OECD, Unpublished materials.

present disadvantages for non-market economies, the benefits of these arrangement may be offset to some degree. Pricing by Western firms of deliveries made on a compensatory basis may reflect an attempt to increase the profitability of the initial transaction due to uncertainty as to the profitability of accepting deliveries as compensation. Reliance on countertrade may also be in lieu of developing the non-market countries' own marketing capabilities with respect to the West -- capabilities which in the long - term may prove to be important.

Western banks, insofar as repayment of credit for deliveries of Western goods is not explicitly tied to the compensatory deliveries to Western firms, would be seen to judge the extension of credit for compensation arrangements on the same basis as in standard trade arrangements. The criteria are thus creditworthiness and the rate of interest as compared with returns on alternative uses of the funds.

The rest - of - the - world, as can be seen from the entries in Table 3 - Section V, should view the expansion of countertrade as it would any expansion of trade on a bilateral basis, with the inherent possibilities of market disruption and the diversion rather than creation of trade, vis a vis third countries.

Attention is now turned to the perspective of the U.S. private sector on compensation arrangements. Since in the U.S. market-oriented economy, the private firm is the primary agent in expanding international trade, this perspective is the key element in examining the prospects for further development of trade with the USSR on a compensatory basis.

### III U.S. PRIVATE SECTOR PRESPECTIVE

On the U.S. side, even though the national interest and the private (corporate) interest frequently coincide, there are occasions when the pursuit of private interests do not result in maximizing the national interest. For instance, export of technology to the Soviet Union or other countries may be profitable for the firm, but if in the long run the use by that country of the technology results in greater penetration into the U.S. or third markets, the results may be adverse for U.S. employment and exports at some future date. This fact may cause organized labor in the U.S. to actively oppose, through political and economic pressure, liberalization of trade and technology transfers.

U.S. businesses in attempting to enhance their profits, market shares, and corporate size, have naturally explored potential for expanding business relationships with the USSR and Eastern Europe.<sup>1</sup> Among the motivations for entering the East European market have been access to a potentially large market; new sources of raw materials; and supplies of lower cost components or manufactured products. Some U.S. businesses see a potential for enhancing profits by exploiting their unique management and production facilities capabilities. For instance, high utilization of existing production facilities and the potential for selling existing technology will spread overhead expenses and help recoup high research and development costs. The sale of technology may lead to the sale of service contracts which existing corporate personnel could fulfill.

---

<sup>1</sup> A recent survey on the attitudes and opinions of American Businessmen on Issues of Soviet-American Commerce, by William F. Kolarik, Jr., reports that U.S. corporate executive officers believe trade with the Soviets to be about as profitable as any other growth markets around the world.

The results of a 1975 survey of 87 U.S. companies currently negotiating or trading with the USSR and Eastern Europe<sup>1</sup> indicate that over 50 percent (49 firms) of the respondents would be willing to accept some form of compensation arrangement. Since 35 firms did not answer the question, the percentage could be higher. The responses seem to indicate a feeling in the U.S. business community that a flexible attitude toward compensation arrangements is necessary if these firms desire to expand further into the Soviet and East European markets. Firms were more eager to enter into a compensation arrangement if the Soviets were to deliver a product in short supply, such as certain raw materials or manufactured goods. The reasons given by those firms which would not accept compensation arrangements include problems of pricing, reliability of supply, creating competition for their own product, or having to shut down operational plants to accommodate the product purchased from the USSR or Eastern Europe.

Figure 1 provides a schematic presentation of compensation agreements. The model is oversimplified in that the sequences of the negotiation and implementation of compensation agreements may not be as distinct as the model implies. Generally, several steps in the model are accomplished simultaneously, but each must be completed to meet the qualification of a compensation agreement.

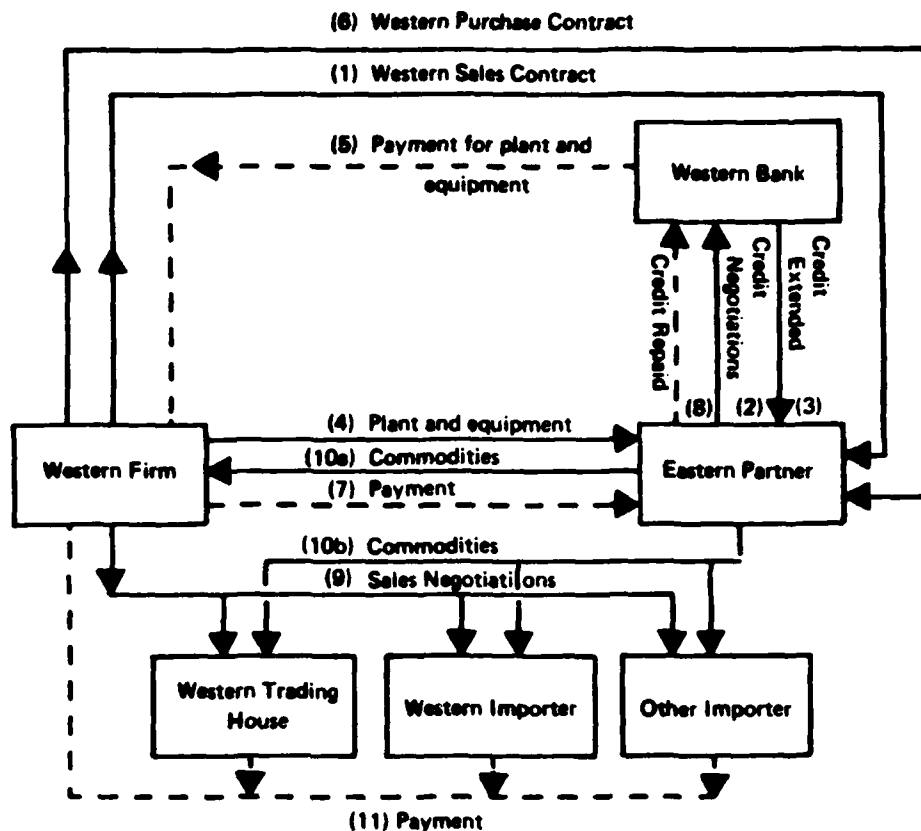
These key elements involve six distinct issues of concern to the U.S. businessman--time horizon, pricing of products covered in the agreements, financing the contracts, technology transfer, quality control of buybacks, and the marketing of buybacks. Each of these will be discussed briefly.

#### A. Time Horizon

Compensation agreements are normally of long duration. This is dictated by the time required to import the equipment and put it in place and begin production for exporting to the U.S. The length of time of the agreement

---

<sup>1</sup> Paul Marer, The U.S. Perspective on East-West Industrial Cooperation, International Development Research Center, University of Indiana, 1975 (unpublished).



The steps illustrated in this model do not necessarily occur in the sequence presented. Some, in fact, often occur simultaneously or in a different order than that presented. Each step is, however, an element in the complete transaction.

----- indicates payment lines.

#### Scenario of Transaction

- (1) Western firm contracts for the sale of plant and equipment to the Eastern partner.
- (2) Eastern partner negotiates with Western bank for credits with which to purchase Western plant and equipment.
- (3) Western bank extends credits to the Eastern partner.
- (4) Western firm delivers commodities to Eastern partner.
- (5) Western bank makes payment (either full or partial depending upon the type of counter-purchase arrangement involved) to the Western firm for deliveries.
- (6) Western firm contracts with Eastern partner for the purchase of Eastern commodities.
- (7) Western firm pays Eastern partner for commodities.
- (8) Eastern firm repays Western credits.
- (9) If the Western firm cannot use or sell the Eastern commodities, it may negotiate directly with a Western or other firm or with a Western trading house which will handle the sale of the Eastern products.
- (10) Eastern firm delivers commodities to either
  - (a) Western partner or
  - (b) Other designated Western party
- (11) Western firm receives payment either directly from Western or other importer or from Western trading house.

\* Source: Countertrade Practices in Eastern Europe, U.S. Department of Commerce Bureau of East-West Trade (April 1977).

Figure 1 ANALYTIC MODEL OF A COUNTERPURCHASE TRANSACTION

has economic implications for the U.S. corporation. As the time horizon is lengthened, uncertainty of future economic conditions increases along with the risk associated with the deal. Thus U.S. corporations will attempt in negotiations to minimize uncertainty and insure some minimum return on their participation in the agreement.

The duration of the contract increases the requirement for the U.S. corporation to coordinate the timing of the sales of U.S. goods and the purchase of Soviet goods. The corporation wants to insure the supply of its machinery and equipment to the USSR and wants to make plans either for the use of the buyback products or for the sale of these USSR products in the U.S. or third markets. Careful scheduling is necessary to fit compensation agreements into the corporate strategy and to insure compatibility with the firm's other operations.

#### B. Pricing

In standard commercial arrangements, the price of the exported U.S. machinery and equipment, if a standard product, will be to a large extent determined by the world market price. If it is a unique product for which there are no comparable substitutes, the price will generally be negotiated. It is probable that the pricing of the U.S. products may be a more complex issue within a compensation arrangement than in standard commercial trade deals, however. U.S. corporations may feel that in order to minimize the additional risk associated with a buyback arrangement, they should negotiate a higher price on their initial sales to the USSR. This practice is designed to yield sufficient percentage of the total potential profit from the arrangement with certainty so that the compensation agreement is economically desirable for the firm. In addition, the U.S. firm is generally not simply exporting a product, but a package including some technical assistance and often, involving entire production lines.

The price of a buyback product, which is often delivered after an extended period of time, is generally determined by the nature of the product.

In the case of raw materials, the price may be tied to future world market prices. Prices for manufactured goods, on the other hand, are usually negotiable and may be discounted from world market prices due to a variety of reasons. The size of the discount depends on the quality of the product, compromises on other issues in the transaction (such as delivery services, management role, etc.), and expected demand for the product. A U.S. firm may offer a price below the world market level and give its Soviet partner the option of selling on the world market at a better price and paying the U.S. firm in hard currency. Thus price of the buyback product is only one aspect of a multidimensional assessment of the overall acceptability of the agreement.

Another alternative means of pricing of buybacks which has been adopted in one compensation agreement is to set the price at the U.S. buyer's own cost of production of the product at that time. Some purchase price adjustment would have to be made for transportation cost from the USSR to the U.S. purchaser. In this case, the U.S. producer looks upon the Soviet product as an additional source of supply without the additional investment for capital facilities.<sup>1</sup>

#### C. Financing of Sales and Purchases

Sales of U.S. products to the Soviet Union may be financed via a number of sources, primarily:

- corporate loans
- commercial banks
- western government sources.

Financing of U.S. sales to the USSR are affected by general legal constraints which the Congress has enacted. The first is the Trade Act of 1974 which prohibits the U.S. government from extending export credits, credit guarantees or investment guarantees directly or indirectly to many non-market economy countries. Nations which enjoy favored nation tariff treatment are exempt from these provisions. This law is currently interpreted to exclude U.S. government agencies from participating in the financing of trade with the USSR.

---

<sup>1</sup> Alfred R. Wentworth, "Financing U.S. Exports to the Soviet Union and Eastern Europe," in East-West Trade, Westview Press, Boulder, Colorado, p.169 (1977).

In addition to this prohibition, U.S. corporations are subject to some restrictions in the financing of U.S.-USSR contracts from the private market. One legal constraint is that national banks are not permitted to lend to a single borrower more than 10 percent of their capital. Since the State Foreign Trade Ministry of the USSR is considered the sole borrower, the limit is more restrictive than in regard to other countries where individuals or organizations are considered the borrower.

In addition, the Johnson Debt Default Act of 1934, as amended, prevents some governments from raising funds on U.S. money markets for purposes other than to finance specific export transactions.<sup>1</sup>

These laws individually and in combination may have, in certain cases, affected U.S. corporations' competitive position and have influenced where and how contracts to which they are a party are financed.

U.S. corporations may finance the sales themselves, if the sales are small or the corporation very large. Generally the deal is financed by bank loans. Even in the case bank loans are forthcoming, the corporation is frequently required to provide a portion of the credit (usually 10-20 percent). This is desired by the banks in order to insure continued corporate interest in the fulfillment of the financial contract. This requirement of financial involvement by the U.S. corporation sometimes discourages smaller firms from negotiating trade deals with the USSR.

In negotiating compensation agreements, the U.S. corporation must be sure to fulfill the bank's requirement that the export contract and the buyback deals are independent contracts. Generally this restriction is imposed so that the loan can be rediscounted or be eligible for government guarantee (except where excluded by law). To meet the requirements for rediscount

---

<sup>1</sup> For a more detailed discussion of special legislation applicable to U.S.-USSR trade, see "Conduct of U.S. Foreign Economic Relations," op. cit.



or government guarantee, the Western loan must be in money terms and unconditionally guaranteed by the foreign trade bank. The loan is not "bankable" i.e., eligible for rediscount, if any direct links exist among the contracts associated within the compensation arrangement.

Past U.S. experience indicates the USSR negotiates with a ceiling on the rate of interest it is willing to pay but the U.S. markets in which it is borrowing are private and currently not subject to government guarantees. For the private lender, this raises the risk which must be offset by higher interest rates. If higher rates are precluded by the USSR negotiator, the U.S. firms negotiating position on pricing of mutual deliveries may be affected.

D. Accomplishing the Transfer of Technology

Typically, U.S. corporations transfer know-how primarily to wholly or majority owned facilities abroad. Generally, they own at least 51 percent of the equity stock of the firm receiving the technology, sometimes 100 percent. Their technology, their managerial skills in production, and their marketing and sales network, among industrialized nations of the West, if not most of the rest of the world, are thus, in most cases, transferred under the direct control of the corporation. Compensation agreements represent a different model for the U.S. corporation, involving a longer term relationship than in a typical license sale, but without managerial participation, since ownership, either partial or total, and thus managerial participation, by U.S. firms in the USSR is not currently subject to negotiations. Other forms of guarantees of quality control are thus necessary to induce U.S. corporate interest in compensation agreements in which the quality of resultant products is a major variable in the viability of the transaction.

The export of equipment to the USSR may range from a turn key project to a selected piece of equipment for a Soviet enterprise production facility. When the buyback component is added to the basic equipment sale, the U.S. corporation is interested in the effective transfer of that technology and

its utilization. In historical perspective, it appears that it is in the mutual interest of both partners to extend U.S. corporate assistance to include involvement with the Soviet ministries and enterprise which will employ this equipment.

U.S. corporations, in negotiating product sales to the USSR with prospects for product buyback, will desire provisions in the contract for payment of personnel services related to getting the transferred technology in place and assisting in the start-up process. This is a difficult set of services for Western firms to value. While payments for such services are usually subject to separate remuneration, the levels of compensation which are negotiated rarely cover the actual salary, not to mention overhead costs, of highly skilled U.S. personnel. These people are likely to be those needed to keep the firm at the leading edge of technology, and thus the opportunity cost of their services is very high for the firm.

The U.S. corporation supplies the technical assistance not only as a contractual obligation, but also in order that the recipient will be more likely to manufacture products of a quality equal to that of the transferring firm or at least meet a minimum standard for marketability in the U.S. or third markets. The transfer of the production knowledge is effected through: technical liaison and continuing operational support; training, both on the job and often at the home facility of the transferring firm; and provision of on-going technical improvements as they are developed during the life of the agreement. These services are necessary to insure the reconciliation of different engineering systems and, above all, to provide the human knowledge derived from punctual application of the processes outlined in the technical data which can only be transferred through personal interface.<sup>1</sup> In recent practice transfer of technology seems to have been most effectively handled when USSR factory personnel, factory foremen and engineers, received training at the facilities of the supplier and additional training on the factory site in the Soviet Union. With the machinery in place, the process comprehended and the Soviet personnel trained, a critical point is reached in the supplier-recipient relationship.

---

<sup>1</sup> Eric W. Hayden, "The Transfer of Industrial Technology to East Europe: A Study of U.S. Corporate Experience" (unpublished draft) March 1, 1973.

Under most compensation agreements, the sale, export, and provision of technical assistance to the recipient is the terminal point in the contract of U.S. exports to the USSR. But in reality, it represents to the U.S. corporation entry into what it considers the more problematic aspect of compensation agreements--the production, delivery and marketing of the buyback product.

E. Quality Control of Products Exported to the U.S. or Third Markets

Interviews with representatives of U.S. companies confirmed that a large majority of those interviewed feel many of the commodities offered by the Soviet and East European partners are not suitable for sale in the West due to poor quality, design, packaging, or servicing, lack of brand name recognition, or high price. It appeared to these U.S. companies that goods that have the appropriate product characteristics and thus could be sold readily for hard currency are not those the Soviet Union seeks to negotiate into compensation agreements.<sup>1</sup> Quality, of course, is only one dimension of the attractiveness of the buyback product. In many cases, a significant trade-off exists between quality and price.

The Soviet products exported to the U.S. may be raw materials which will become inputs into the production process of U.S. corporations. The quality of a raw material can generally be tested in advance if it is currently produced and the U.S. firm can assess what it will receive. In some cases, however, the compensation agreement may exchange equipment for development and extraction of raw materials from new sources within the Soviet Union for deliveries of those raw materials, and their quality will not be known but only conjectured by USSR and U.S. experts. If the buyback products are semi-finished or finished goods the quality variable can be affected by human decisions and control to a far greater degree than in the case of raw materials.

The problem of the quality of the buyback product has resulted in some U.S. firms refusing to consider such arrangements. It appears to them that

---

<sup>1</sup> Paul Marer, op. cit.

the prospective profits do not warrant the managerial effort and financial risk necessary to pursue such a deal. Several useful approaches to the problem of insuring the marketability or quality of buyback products suggest themselves:

The first would be the conclusion of compensation agreements which involve buyback of goods of already-proven quality. The U.S. firm would only be required to either market it through its normal channels or establish special channels for the Soviet goods. In the case of raw materials this would be relatively easy. In the case of manufactured goods, the U.S. company may need to repackage or introduce Western style packaging into the Soviet production process.

Secondly, the problem could be effectively resolved by extending the technical assistance component of the import of U.S. products into the Soviet production for export phase. From an American perspective, this would appear to have positive spillovers to both partners. For the Soviet partner, it might mean that because of U.S. interest in quality control and competitiveness of the products in world markets, the technical transfer will be a continuing process. If Soviet importation of technology is designed for production to earn hard currency through exports, as well as supply domestic demand, then this continued involvement by the U.S. company can aid in insuring the international competitiveness of the product. It would seem that in view of the pace with which technology in many areas becomes obsolete, a major concern for the purchaser is that the technology bought is not obsolete by the time it is put on-stream in the production process. For the U.S. firm, the extended relationship would insure its involvement in implementing quality control procedures.

Even such an extended cooperative relationship into the production phase only partially offsets the natural inclination the U.S. firm has to transfer technology to foreign production facilities over which it has equity control. This relates to the potential creation of a competitor for world markets through the transfer of know-how. Thus the U.S. partner may insist

on contractual limitations on the future deliveries by the Soviet Union to the U.S. and third markets. These limitations would be of the same nature as those involved in conventional international licensing transactions.

Third, if the long and continuous involvement of U.S. personnel on the Soviet production side is not desirable, the burden of insuring the quality of products can be shifted through an agreement in which the technical specifications of the product are clearly spelled out and the Western firm has right of refusal or financial compensation where the products turned over to the U.S. are substandard by the terms of the contract. If the Soviet producer should be continuously unable to meet the standards, the contract, with due lapse of time to permit the Soviet enterprise to make adjustments, should then revert to hard currency payment in lieu of product.

Fourth, as mentioned in the pricing section above, products of lower than the international standard may be subject to price discounting when delivered to the U.S. firm. These products could be marketed under a trade name established for the quality level of the product, thus insulating the original trade name from quality variations.

#### F. Marketing Aspects of Buyback Products

Regardless of the category of buyback products (raw materials, intermediate or final), their successful introduction into U.S. markets may require considerable effort on the part of the U.S. corporation. To the U.S. corporation, marketing is one of the critical aspects of its corporate life and functions. It employs many of its best resources in marketing and sales. The difference between the buyback price and the price at which the good will appear in Western markets may include a substantial percentage attributed to selling cost rather than net profit.

Selling of imported raw materials in Western markets is perhaps the least complex for U.S. firms. The firm generally can use its normal sales force and outlets to determine the sources of demand. Once the quality of raw materials

is determined and the potential buyers advised, then the principle functions are placing orders and servicing the customer to insure adequate supplies and prompt deliveries.

When the U.S. corporation is receiving finished or semi-finished goods, the problem may be somewhat broader than when the product is a raw material. In these cases, the marketing personnel must be familiarized with the technical characteristics, both positive and negative, of the finished goods. They are concerned, for some types of products, that the packaging meets the needs of the customer for shipping and storage. They are particularly interested in whether they can rely on the delivery dates, and the availability of any spare parts which might be needed, particularly if equipment or machinery is involved. Spare parts and availability of service are two problems of special concern to U.S. businesses since they are often critical components of competitive advantage in particular markets.

One potential framework for future compensation arrangements would be for co-production of interchangeable parts in both the U.S. and USSR, which would facilitate supply of parts to their respective markets and jointly to third markets.

While the majority of existing compensation agreements and those under negotiation do not presently involve finished products exported in large quantities, the composition of Soviet exports is expected to change over time, and, in sensitive areas, might be seen as a threat by U.S. firms in third markets. It is doubtful that a U.S. business would be willing to enter into an agreement where the Soviet output might be competitive. Thus, those products involving frontier technology are not likely candidates for compensation agreements.

However, there are a number of cases where the U.S. firm could also benefit from the Soviet sale of finished products in third markets. For example, compensation agreements can be used to open a potential market to the U.S. manufacturers. Products marketed in a third country would not displace U.S. exports if the U.S. product is otherwise barred from that market. The U.S.

might not be active in a specific market because of transportation costs, local costs and standards, or non-tariff measures. In the case that a compensation agreement permits the U.S. partner to acquire Soviet products to ship to a previously inaccessible market, the U.S. partner clearly benefits from such an agreement. Other benefits which might accrue are the follow-on sale by the U.S. company of spare parts for the capital equipment and parts and components for further processing, earnings from marketing fees and royalties, or such intangible benefit as complementarity to U.S. product lines in third countries.

#### IV PROSPECTS FOR FURTHER DEVELOPMENT OF ECONOMIC RELATIONS ON A COMPENSATORY BASIS

Even though compensation agreements are normally viewed as involving a bilateral trading pattern, there are important multi-national considerations which play a role: the Western nations and their respective firms are in competition for export markets; most advanced technology generally has at least two or more potential suppliers; financing of the trade agreements may either be facilitated by government guarantees or direct government loans or hindered by government restrictions; proximity to markets and logistical support are important in many commodity areas; new resource discoveries and changing world markets may result in redirection of trade flows among nations as well as between nations; and finally, the world political environment is an important variable in forecasting the potential expansion or contraction of economic activities between any two nations.

In the United States, the government and corporations may have divergent interests. The national interest may dictate expansion of U.S.-USSR compensation agreements, while private interest is not strong enough to facilitate such an expansion, or vice versa.

The summary of the prospects for further development of compensatory agreements is presented with an awareness of these global, environmental factors, but concentrates on the more narrow U.S.-USSR relationship.

##### A. Prospects for Continued Development of Compensation Agreements

Official Soviet announcements and current plans and forecasts indicate that USSR imports from the United States and other industrialized nations will continue to increase in the near- and mid-term, although not as rapidly as in recent years. The future role of compensation agreements in helping to accommodate these imports from hard currency nations will depend upon several



TABLE 4  
PROJECTED USSR TRADE WITH THE INDUSTRIALIZED WEST

<u>Year</u>	<u>USSR EXPORTS</u>		<u>IMPORTS</u>		<u>NET</u>
	<u>Total</u>	<u>Growth</u>	<u>Total</u>	<u>Growth</u>	
1976	10,588	28.61	14,483	9.17	-3855
1977	11,973	13.07	14,201	-1.95	-2217
1978	13,274	10.86	14,942	5.22	-1655
1979	14,359	8.18	15,922	6.56	-1260
1980	15,852	10.42	17,207	8.08	-1342
1981	17,069	7.67	19,129	11.16	-1655
1982	18,905	10.76	20,427	6.78	-1505
1983	20,221	6.96	22,441	9.86	-1716
1984	22,224	9.91	24,336	8.44	-2094
1985	24,135	8.60	27,119	11.44	-2965

Source: SRI-WEFA Econometric Model of the Soviet Union

variables. The most important of these variables seem to be:

- The Soviet Union's ability to generate sufficient hard currency without the aid of compensation agreements
- The USSR's use of other forms of accommodating hard currency trade flows
- Continued participation by Western firms in compensation agreements

Projections of Soviet exports and imports, using the SRI-WEFA Econometric Model of the Soviet Union, estimate a continued negative net trade balance with the Industrialized West (see Table 3). In spite of the fact that the debt-service ratio tends to stabilize in the 1980's (see Table 4), it still appears likely that means of financing hard currency trade other than compensation agreements will not be totally adequate. Given the increasing debt-service ratio, it would seem reasonable to assume that the Soviet Union's interest in expanding compensation agreements with the West will increase. This may manifest itself in two ways: first, the USSR may more frequently insist on compensation agreements as a condition for trade; or secondly, the Soviet Union might move to make compensation agreements a more economically attractive vehicle for U.S.-USSR business contracts.

The continued willingness of U.S. firms to participate in acceptance of compensation agreements will depend on their identifying commodity areas in which they have an economic interest as well as on the specific characteristics of negotiation and implementation discussed in Section III.

#### B. Commodity Areas

Which Soviet export commodities are likely to attract U.S. corporate interest in future compensation arrangements? Obviously, those products which are in short supply world wide; which can be purchased more cheaply from the Soviet Union; or which are technologically advanced. Natural gas, forest products, and chemicals are the major product areas covered in buyback

TABLE 5  
PROJECTED DEBT-EXPORT AND DEBT-SERVICE RATIO, 1976-1985

<u>Year</u>	<u>Debt-Export Ratio<sup>1</sup></u>	<u>Debt-Service Ratio<sup>2</sup></u>
1976	1.17	.23
1977	1.17	.23
1978	1.15	.27
1979	1.12	.30
1980	1.07	.31
1981	1.07	.32
1982	1.02	.32
1983	1.01	.32
1984	.98	.31
1985	.97	.31

---

<sup>1</sup> Outstanding Debt at end of year--accumulated hard currency holdings  
Total Exports to the Developed West

<sup>2</sup> Interest payments in hard currency and credit payments in hard currency  
Total Exports to the Developed West

Source: SRI-WEFA Econometric Model of the Soviet Union

agreements already in force between the USSR and firms in the U.S., Western Europe, and Japan. According to Soviet Deputy Foreign Trade Minister Vladimir Sushkov, over fifty large industrial projects based on compensation arrangements with the West are currently under way. Projected Soviet exports under these arrangements are (in millions of dollars, by product group):

<u>Product</u>	<u>1975-80</u>	<u>1980-85</u>
Natural Gas	4,700	10,000
Chemicals	700	1,600
Timber and Paper	1,300	100 <sup>2</sup>
Aluminum	100	400
Coal	80	700
Steel products	<u>450</u>	<u>1,000<sup>3</sup></u>
	7,330	13,800

Thus, recent experience suggests that U.S. firms will be interested primarily in raw materials such as natural gas and oil and intermediate goods such as chemicals. Although the demand for finished manufactured products has not been strong, the USSR has shown an interest in developing these product areas for future buyback possibilities. For instance, one Soviet official has indicated the USSR will encourage countertrade in light automobiles, construction machinery, tractors, uranium enrichment facilities, airplanes, small electric motors, precision instruments, consumer durables, and electronic components.<sup>1</sup>

In the area of raw materials, the Soviet exports likely to be of most interest to U.S. firms are oil and natural gas. Oil and oil products are currently the largest single source of Soviet hard currency revenue, and although exportable surpluses are expected to decline, they should continue to be of interest to the energy-conscious U.S. American firms. Similarly there is interest in natural gas, which the Soviet Union can potentially

<sup>1</sup> Vneshnyaya Torgovlva, No. 7, 1976.

<sup>2</sup> If a third Soviet-Japanese Siberian forestry project is concluded, this export category would be much larger.

<sup>3</sup> Assuming that the Kursk steel complex comes on stream.

provide from its largely untapped supplies in exchange for U.S. technology. The USSR can potentially increase its coal exports by seven to eight percent annually, but given large U.S. coal reserves, American firms are not likely to show much interest unless considerable cost savings can be realized. Soviet wood and wood product exports represent a comparable category.

Intermediate goods, particularly chemicals and chemical products, have been an area of major interest to U.S. corporations and are likely to continue to be of interest in the future. In addition, markets are developing in Western countries for iron ore pellets, and it is possible that steel and other metals would also be exported to these markets by the USSR. The Soviet Union and the Kaiser Corporation are currently negotiating a major buyback agreement for the development of the aluminum refining industry. The deal should result in substantial U.S.-Soviet trade flow during the 1980's.

Finished products might be the area of greatest future potential particularly automobiles and trucks, tractors, construction machinery, and aircraft. The development of such production facilities as the KAMA River Truck Plant will facilitate the export of cars and trucks to the West. Already, the ZHIGULI is being marketed in Britain under the name Lada, and it will shortly be marketed in the U.S. The potential for these types of products may well come in third markets, where performance characteristics of the Soviet product line may perhaps be better suited than the American counterparts (e.g., Soviet automobiles may give better service on unimproved roads in developing nations than U.S. autos would, or similarly Soviet off-road construction machinery). The USSR is experiencing considerable success in marketing the Belorus' tractor in the U.S. as well. While this model lacks some of the features of U.S. products, it is equally serviceable and the price differential is considerable.

C. U.S. Perspectives on the Need for Modification in Compensation Arrangements

Some U.S. corporations view compensation agreements as arrangements which are to be entered into if standard contracts for single transactions in hard currency are not forthcoming. In many cases the negative attitude does not reflect any reluctance to do business with the Soviet Union but rather their perception that the arrangement is unattractive in a business sense. Since U.S. corporations will remain cognizant of that factor, the future of U.S.-USSR compensation arrangements in part depends on mutually satisfactory solutions to problematic aspects.

Some specific steps represent directions which might be taken to increase attractiveness to U.S. firms. Negotiation periods as brief as practicable minimize the U.S. corporate expense associated with the negotiations. These expenses must be covered by the transactions either through higher product prices of U.S. goods, lower prices offered for Soviet goods, or reduced profit levels.

Second, the U.S. firm, in cooperation with the representatives of the Soviet Ministry of Foreign Trade, might actively seek a mutually agreeable product mix for buyback. A blend of the production capabilities of the USSR partner with the marketing capabilities of the U.S. partner could result in a mutually more profitable pattern of commercial activity.

The pricing of the buyback products can be carefully constructed so both partners are protected. Prices for raw materials keyed to world market prices, are flexible during the negotiation phase, particularly important if it is protracted.

If U.S. involvement were to continue into the production stage at the Soviet enterprise level, a mutually beneficial approach to the quality control issue would be promoted. The trade-off between quality and price of the buyback product for the U.S. firm will of course vary with the nature of the product, market characteristics, and the specific role in marketing envisioned for the firm.

Co-production or joint production, might bring together the multiple assets of each partner. This might be accomplished by U.S. technical equipping and constructing of production facilities in the USSR. The facility would then be leased from the Soviet Union with the direction of the facility coming from a Board of Directors of the two represented parties.<sup>1</sup> These cooperative arrangements might result in U.S.-USSR joint economic efforts in the third world.

The buyback contract might explicitly take into account the U.S. corporate contribution in the marketing of USSR produced products. It may be possible to begin to explore joint marketing arrangements, particularly with respect to third markets. The cooperative marketing arrangement would complement the cooperative production arrangements noted above. Through this cooperative association the risk and expense of marketing could be jointly shared. Any limitations included in the agreement which would limit U.S. activity in marketing in specific regions would, of course, require careful consideration.

Although this is not an exhaustive list, it does indicate areas for future discussion on compensation agreements between the U.S. and USSR. All evidence in the United States--both public and private--supports the conclusion of continued interest in the utilization of compensation agreements as one component of expanded U.S.-USSR trade. Although there are problems (many of which are mentioned above), the mutual economic interests of the U.S. and the USSR are broad enough to warrant continued explorations and discussions on the role of compensation agreements in their foreign trade relations.

---

<sup>1</sup> Samuel Pizar, "The Changing Economic and Legal Environment for East-West Investment," The International Lawyer, Vol. 10, No. 1, Winter 1976, p. 10-11.

## V SUGGESTED ISSUES FOR DISCUSSION

This section lays out a partial list of specific issues suggested as possible discussion items for the workshop. Additional suggestions from the workshop participants were forthcoming. The issues fall into four, somewhat overlapping areas of concern: the economics of compensation agreements, practical problems, political/economic issues, and prospects for future development of trade on a compensatory basis. Among the issues discussed at the workshop were the following:

### A. Economics of Compensation Agreements

1. What are the participants' perspectives on the nature of risks for Western and Soviet participants in compensation agreements and how might these risks be reduced? For example:

- financial risks due to Western inflation (unlike direct foreign investment, the U.S. partner does not own assets which rise in value as a result of inflation) and movements in exchange rates
- risks of creating competition (while, from a national point of view additional capacity is created, from the perspective of an individual company it is potential competition for U.S. and third markets).

2. Do compensation agreements present advantages for insuring effective transfer of technology from the Western firm to the Soviet enterprise? How would these differ from transactions involving turnkey plants, technical assistance, and contractual performance guarantees? In comparison to licensing with royalty payments and provisions for technology updating?



3. While compensation arrangements are considered a self-liquidating form of financing, given the expansion of their use from a fairly small base, might not debt servicing in the interim between deliveries of Western equipment and completion of the added export capacity begin to present some problems?

4. Given the emphasis in the Tenth Five Year Plan on modernization and expansion of existing facilities, what role are compensation arrangements to play in this effort? Does this imply somewhat less of an emphasis on large compensation deals is to be expected, or is the emphasis on compensation arrangements to continue for the very same reasons--maximization of added capacity for a given resource commitment?

5. How does the use of compensation agreements effect the volume and composition of trade flows?

6. What are the impacts on pricing of mutual deliveries of identifiable risks and uncertainties in compensation arrangements?

B. Practical Problems

1. How are major shifts in world market prices accounted for in compensation agreements? What is the possibility for recontracting?

2. What sorts of alternative pricing arrangements are possible in compensation agreements from the Soviet point of view?

3. What is the Soviet view of the present and future role of switches in countertrade? How is discounting of Soviet goods to Western purchasers viewed in connection with this?

4. An institutional question: when a number of FTOs and enterprises are involved in a compensation agreement with the West, how is coordination among them accomplished and how are accounting aspects handled?

5. What role might Western quality control supervisors play at the Soviet enterprise (production) level? What alternatives are open for establishing effective quality control procedures that would reduce uncertainties for Western firms?

6. What are the factors bearing on decisions on the percentage of payment via compensation and the time profiles of mutual deliveries?

C. Political/Economic Issues

1. What impact on the attractiveness of compensation agreements is the rising protectionist sentiment (especially in West Europe) likely to have?

2. In what sense is the expansion of trade on a compensatory basis a substitute for real integration of the USSR into the world economy? What impacts on intra-CMEA and CMEA-Rest-of-the-World Trade patterns should be expected due to expansion of compensation agreements with the West?

3. Does the bilateral nature of compensation agreements pose difficulties in light of U.S. attempts to expand trade on a multilateral basis via the MTN, etc.?

4. Are the dependencies (for raw materials, etc.) implied by expanded trade via compensation agreements of a mutual nature or are the risks along this line weighted more heavily on the Western side?

D. Prospects

1. Are compensation agreements easier to reach with conglomerates (e.g., highly integrated Japanese firms) which have come to predominate in recent years?

2. What new institutional arrangements have been made in conjunction with compensation agreements with Western Europe and Japan and how do these compare with options open to U.S. firms in expanding business with the Soviet Union?

3. What scale is envisioned as optimal for individual compensation arrangements? Duration? How do these factors bear on expansion of trade with the U.S. on a compensatory basis? How can participation of medium-sized firms be encouraged?

4. How are compensation agreements to be expanded in the area of manufactured goods? Aren't the goods most readily marketable in the West least likely to be offered as compensation?

Appendix A  
U.S./SOVIET WORKSHOP PARTICIPANTS

## Appendix A

### U.S. Workshop Participants

Edward S. Bozek	Bureau of East-West Trade, Department of Commerce
M. Mark Earle, Jr.	SRI International
Richard B. Foster	SRI International
Gary Fromm	SRI International
Weldon B. Gibson	SRI International
Edward A. Hewett	University of Texas
Allen Lenz	Bureau of East-West Trade, Department of Commerce
Paul Marer	Indiana University
Francis W. Rushing	SRI International

Observers from the U.S. Government and the US-USSR Trade and Economic  
Council also attended workshop sessions

### Soviet Workshop Participants

1. Primakov E.M.	IMEMO
2. Maximova M.M.	IMEMO
3. Anikin A.V.	IMEMO
4. Tsukanov S.V.	Ministry for Foreign Trade
5. Dvoretz N.L.	Gosplan
6. Bobrakov Y.I.	Institute of the U.S. and Canadian Studies
7. Naborov V.B.	NIKI of Ministry for Foreign Trade
8. Ivanov I.D.	Diplomatic Academy of Ministry for Foreign Affairs of the USSR
9. Belchuk A.I.	IMEMO
10. Pavlov V.G.	IMEMO
11. Rozenberg M.G.	Academy of Foreign Trade
12. Gorbunov S.V.	IMEMO
13. Ognev A.P.	IMEMO

### Observers:

Gribkov M.N.	Soviet-American Trade Council
Popov B.L.	Soviet-American Trade Council
Zonova L.M.	IMEMO
Koroliev I.S.	IMEMO
Simonian R.R.	IMEMO